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Charity Care Programs: Part of the Solution or Part of the Problem?

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CHARITY CARE IS AN INTUITIVELY ATTRACTIVE MODEL FOR ADDRESSING the health care needs of the medically underserved. The notion that practitioners can voluntarily provide "free" care to uninsured patients presenting with nonemergent problems—especially in rural areas—has met with widespread acceptance.[1] Indeed, as the numbers of uninsured and underinsured Americans increase,[2] such programs are proliferating and are receiving significant support from public and private funders. Both the Robert Wood Johnson Foundation and the Office of Rural Health of the US Health Resources and Services Administration (HRSA) have funded dozens of programs.[3]

Traditional charity care—doctors directly dispensing needed care to individuals without charging for these services—is thought to be a common practice, even part of the physician's ethical and social contract with his or her community. (A promise to provide charity care is in fact part of the Hippocratic Oath.) Yet charity care has been criticized by public health practitioners at several levels. First, there is a significant degree of shame attached to the receipt of any kind of charity. Free or low-cost health care at the discretion of providers has the potential for being degrading to patients, given that at some point in the transaction begging essentially has to occur. Second, for the practitioner, there is an economic incentive to provide narrowly focused, episodic, and minimal care when there is no source of reimbursement. Thus charity health care is likely to suffer systemically from inferior quality. Third, again due to economic imperatives, charity care is unlikely to fill existing health care access gaps. The disparity between the quantity of care offered and the medical care needs of the poor in any given community is so wide that charity care is ultimately ineffective. It is at best a well-intentioned gesture, unable to meet the magnitude of need that exists in underserved populations and therefore not a substitute for public health policy guaranteeing universal access to medical care.

In the traditional charity care model, physicians could shift costs from wealthier patients (or their health insurance companies) toward the poor by selectively writing off back "debt" for low-income patients and charging

inflated fees to the well-to-do. Today, unlike in the days of fee-for-service reimbursement, cost shifting within the individual private practice is no longer tolerated by third party payers. This means that the true cost of "free" care is increasingly absorbed by physicians' businesses, rather than being shifted to other patients or their insurers, as in the past (essentially spread across the other patients served by that practice). Thus, charity care, like house calls, now involves an economic sacrifice on the part of the individual physician.

Because of the general unwillingness of physicians to care for indigent and uninsured patients now that this means losses to their own incomes, today's charity care model has added a new element: an administrative, gatekeeping and case management function that is fragmented away from the actual delivery of medical care. This new element is seen by its proponents as necessary to leverage physician participation through minimizing the time expenditures (and therefore financial losses) of individual private practices.[4] However, the inputs required to sustain this model and the benefits derived for underserved populations have not yet come under sufficient analysis.

Theoretically at some point the cost of delivering "free" care could exceed the cost of directly subsidizing additional medical care capacity in a community. If charity care programs based on the new model are shown not to be cost-effective, the case would be particularly strong for subsidizing a model of proven efficiency and quality in caring for medically underserved populations, such as community health centers.

Charity care based on voluntarism on the part of community practitioners who do not otherwise meet their community's needs, organized by administrative and gatekeeping entities, is promoted as a serious part of the solution to the problem of health care access for medically underserved populations. My own observations of Health Links, a local project in Franklin County, Massachusetts, leads me to conclude that this approach has limited utility in meeting the medical needs of medically underserved populations, is excessively costly, and provides fragmented, often substandard care for the poor. In our community, Health Links replaced the traditional model of informal charity care in many medical practices. Although it certainly altered the "flow" of patients unable to pay for health care, how much added value it delivered to the medically underserved remains open to question.

During the two year period 1995–1997, I served as a volunteer physician with Health Links and was a member of its advisory board. I was concurrently involved in a community organizing project aimed at the development and start-up of a federally funded community health cen-

ter for Franklin County. This health center opened its doors in 1997 and has subsequently assumed responsibility for the primary care of all former Health Links patients.

Health Links was a conscientiously administered example of the new charity care model. As a participant, I directly observed the personal dedication of its staff, managers, and volunteers at close hand. As an advisory board member, I received copies of the project's monthly statistics and annual reports, which I analyze below. The data overall demonstrate that small numbers were served and that much of Health Links' activities resulted in gatekeeping *from* rather than referrals *to* standard-quality care. The commitment of many community physicians to actually see patients without charging a fee was extremely limited, and did not increase over time. Finally, the project was quite costly overall.

THE SETTING: FRANKLIN COUNTY, MASSACHUSETTS

Virtually the prototype of rural New England, Franklin County is the most sparsely populated county in Massachusetts, with 26 towns and a total population estimated at 70,806 in 1999.[5] Since the 1700s, Franklin County's social and economic life has been organized around its many densely populated, socially tight-knit industrial villages (each town, a jurisdictional entity, typically includes several of these historic villages) surrounded by a productive agricultural countryside.[6,7]

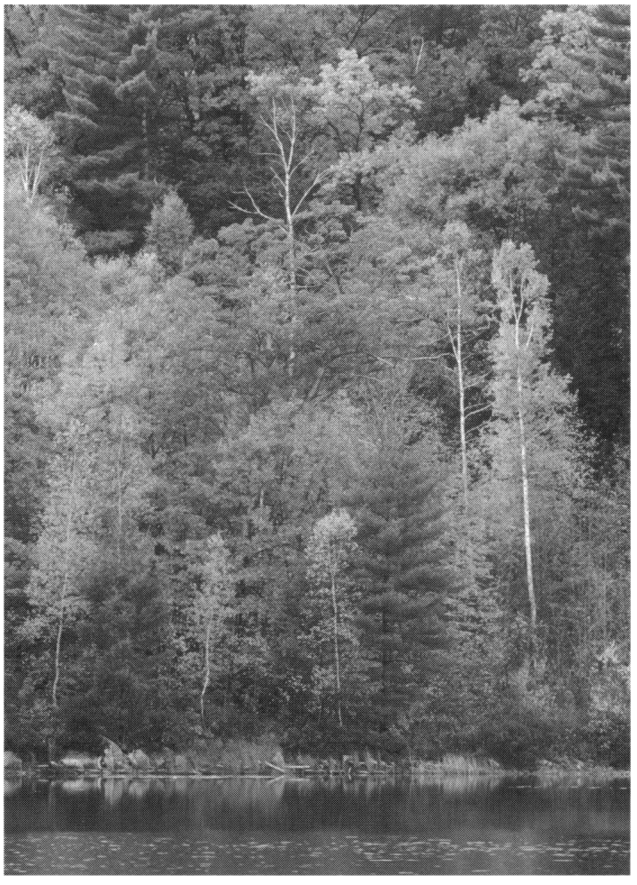
Skilled employment in the major local industry of the 20th century, toolmaking, reached the tens of thousands in its heyday during World War II, declining rapidly in the 1960s and 1970s. The postwar period also brought a rapid decline of the county's agricultural sector. Many Franklin County residents are from former farming families who inherited their land and a way of life that has become less and less sustainable.

The county's population numbers reveal trends of both out-migration and in-migration. With shrinking opportunities for skilled industrial employment and family farming, changes in the county's demographics reflect a relative loss of younger working-age adults and a relative increase in the population segments living in poverty at the extremes of age.

Asian, former-Soviet, Latina(o), and to a lesser degree African American segments of the population, while still in smaller than state and national proportions, are increasing rapidly through migration from the nearby urban centers of Worcester, Springfield, and Holyoke. Unlike their postwar counterparts who benefited from federal agricultural price supports and from land values at bottomed-out post-Depression levels, today's immigrants face low-paid employment and a dearth of affordable housing. Service jobs in today's growing tourism sector rarely supply a living wage or employer-paid health insurance.

ACCESS TO HEALTH CARE

As much as 15% to 20% of the adult population in Franklin County is estimated to lack health insurance or an income adequate to pay for needed medical care.[8] Health insurance has become increasingly unaffordable for Franklin County employers. Small employers, most of whom are themselves struggling, often forego health insurance altogether, not only for their workers but also for themselves and their families. Since 1996, welfare reform has exacerbated the usual "churning" effect of rapidly alternating Medicaid eligibility and disenrollment among the poor, with people now covered by Medicaid



for shorter periods of time, interspersed with periods of no health insurance coverage.

Prior to the existence of the Health Links program, traditional charity care and the community hospital's emergency department were the only points of access to medical care for uninsured or underinsured Franklin County residents. The hospital (privatized in 1986 from its longstanding status as the only public hospital serving the county) had never had an outpatient primary care department, nor was there a community health center serving the area. Thus, apart from federally funded family planning and other similarly narrow clinical public health services offered by nonprofit agencies, the Health Links program represented the first time in the community's life that ambulatory general medical care was offered to the population at no cost to patients.

Description of the Health Links Program

Health Links was organized around the new model of charity care, in which people in need of medical care are referred to practitioners who have committed themselves in advance to providing some free or reduced-fee services.[4] The program was initiated in 1993 by a small, ad hoc group of hospital and human service workers who had become concerned that increasing numbers of their clients were unable to gain access to needed basic care. As a first step, they initiated informal arrangements with local physicians that enabled patients to be seen in local doctors' offices for standard-quality care for which no fee would be charged.

Demand quickly increased, and more time was spent on the informal gatekeeping role. This became untenable when patient demand skyrocketed due to word of mouth and when local physicians began to refer all indigent patients to Health Links as a prerequisite to seeing them in the office. The community hospital sought and received federal funding for Health Links from the Rural Health Outreach Program of the Health Resources and Services Administration for 1994–1997. With this grant funding, the hospital was able to hire staff to coordinate the activities of volunteer clinicians and to train nurses and lay health advocates to offer a range of services, including nursing triage, brief treatment, referrals, medical case management support, and limited prescription assistance.

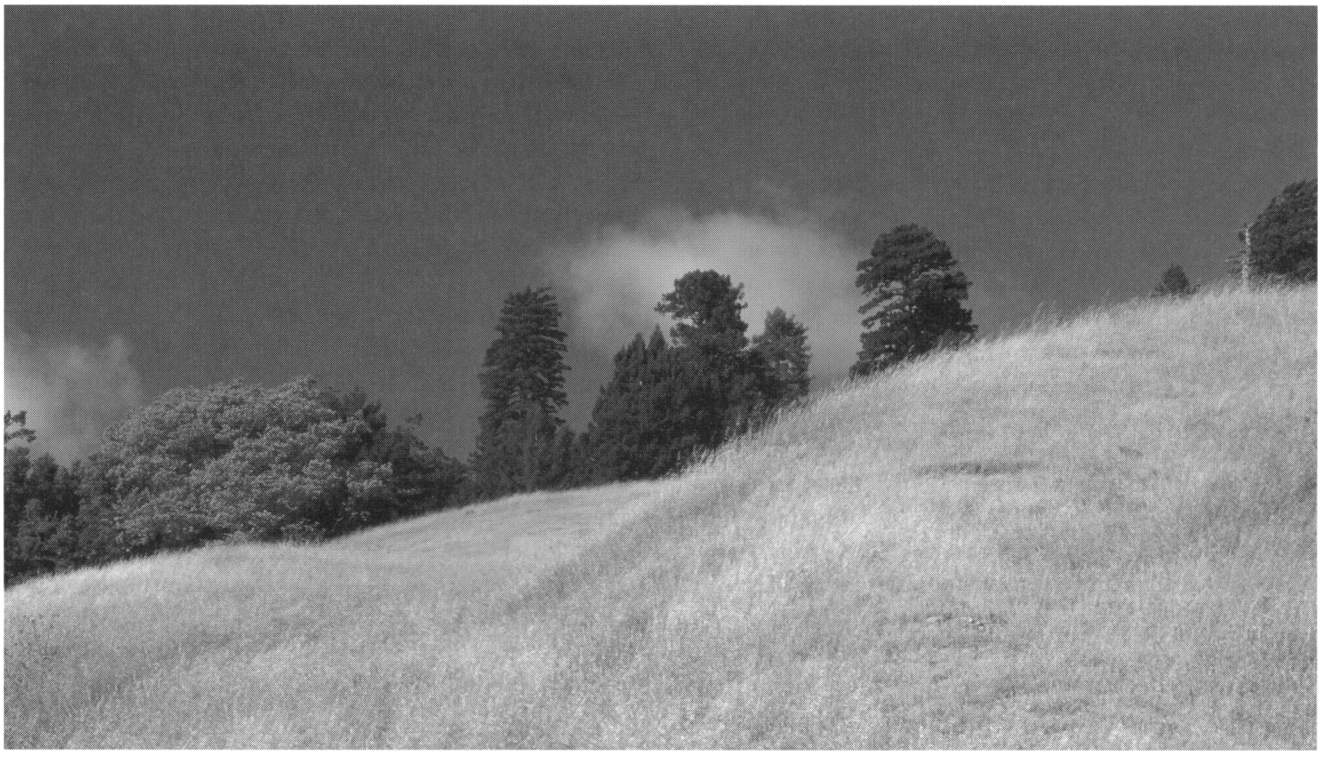
Health Links was staffed by three nurses (two part-time nursing coordinators and one full-time staff nurse), a volunteer coordinator, and a program manager. Limited clerical support was also provided by the hospital. In addition, more than 60 nurses and lay health advocates volunteered to provide assessment, triage, and assistance with paperwork at the walk-in sites. Through a partnership with the University of Massachusetts School of Nursing, nurse practitioner students performed comprehensive histories and physical exams at one of the sites. (This component of the project was discontinued after vocal community members attacked the students for asking routine questions about home firearm safety.) One internist in the community volunteered as the project's medical director. Other physicians, myself included, also volunteered at the walk-in sites. (A few volunteered in this way as an alternative to accepting referrals in their offices.)

Face-to-face contacts occurred at the Health Links office in the hospital's medical office building or at one of two walk-in sites: the school nurse's office at a regional high school in the western part of the county and a church basement in the central part of the county, where Health Links was co-located with a weekly community meal program.

Patient contacts occurred either by telephone or in person at one of the walk-in sites. Nursing triage was performed during all contacts, resulting more often than not in no follow-up treatment and no referral to a medical office for standard-quality medical services. Volunteer lay health workers provided assistance with completing the required paperwork (see below) and offered large amounts of social reassurance and support.

Primary care was not routinely offered through the Health Links program. Most patients were seen on an episodic problem-oriented, or urgent-care, basis. For example, those presenting with acute infections typically received self-care instructions, perhaps a prescription for antibiotics, and instructions to return to Health Links should the problem fail to resolve or a new problem appear. Patients with chronic conditions such as diabetes or asthma—not easily managed on an urgent-care basis—received referrals to family physicians or general internists.

Health Links patients' access to preventive services such as Pap smears, mammograms, and other routine cancer screening tests as well as smoking cessation or nutrition counseling was limited according to the site and the clinician's discretion. Gynecologic or rectal exams could only be performed at the one site that afforded adequate privacy, the high school nursing office. There-



fore, many medical services that would normally be provided in the primary care setting either were not offered or were arranged via "unnecessary" referrals to specialists (for example, urology referrals for patients with urinary symptoms).

Eligibility. Before receiving services, patients were required to complete a written registration form that collected the following information: age, gender, family size, gross family income, employment status of patients ages 20–64, ethnicity, town of residence, recipient status for other benefits, and other health care access markers (whether they had health insurance, whether they had an ongoing relationship with a primary care provider, and whether they had been seen in the hospital emergency department within the previous two years.

The Health Links program designated a $22,000-per-year income for a single individual or family as the income eligibility cutoff. All those meeting this criterion who were Franklin County residents and who self-reported that they were uninsured or that their health insurance would not cover the cost of needed medical care were eligible for services through Health Links. A very small number of individuals were turned away due to not meeting the income eligibility criterion. Ineligible individuals were not counted for statistical purposes.

Data collection. Consistent data collection activities were carried out by Health Links staff beginning in 1995. The staff maintained daily logs of all patient contacts with Health Links staff and volunteers, including telephone as well as face-to-face contacts. In addition, the Health Links staff tracked participation by local provider offices using a monthly referral log, which identified providers but not patients.

Health Links data were aggregated monthly for reporting purposes and to protect patient confidentiality. I retrospectively analyzed monthly reports for a two-year period, September 1, 1995, through August 31, 1997, to assess quantity of care, provider participation, and costs of the program.

PATIENTS SERVED BY THE HEALTH LINKS PROGRAM

The 1,476 patients served by the Health Links program over the two-year period were primarily from among the working-poor and unemployed residents of Franklin County (Table 1). By self-report, just over half were employed. The vast majority (78.5%) were adults ages 20–64. Just under 20% were ≤19 years old, and only 2.1% were ages 65 and older. A low level of literacy was not uncommon, judging by the fact that many patients

required help in completing registration paperwork. Virtually all were Franklin County residents; fewer than 1% were homeless or from a town outside of the county. All 26 towns in the county were represented in the Health Links patient population.

These demographics in part reflect the pattern of health insurance eligibility in Massachusetts. During the two-year period, anyone 65 and older was eligible for Medicare and all children younger than age 12 from low-income families were theoretically eligible for MassHealth (the state Medicaid program) or the Children's Medical Security Program (a state-funded insurance program). More recently, age eligibility for these two programs has expanded to cover adolescents up to the age of 18.

Of the 1,476 unduplicated patients, 10.4% had gross annual family incomes >$22,000, according to self-report. These individuals did not meet the income eligibility criterion for the program but still received services because they were uninsured or underinsured.

Family size. Of those reporting family size, about half (48.2%) reported living in families of two to four people, while 41.1% reported being single, living alone; 154 individuals did not respond to this question.

Employment status of working-age adults. Just over half (54.4%) of the 1159 adult Health Links clients ages 20–64 reported being employed. Among those who were employed, 62.2% reported holding part-time jobs and 37.8% reported working full-time.

Race/ethnicity. The Health Links program collected data on "race"/ethnicity in order to comply with federal funding requirements. Ethnic identification was not reported for 12 individuals. By self-report or report of parents/caregivers, the overwhelming majority of Health Links clients (1320/1464, 90.2%) were "Caucasian." According to county statistics, which use racial/ethnic categories quite different from those used by Health Links staff, 97.7% of Franklin County residents self-report as "white" (Unpublished data, Franklin Regional Council of Governments Planning Department, 1996).

Health Links saw higher proportions of minorities than exist in the general population. Specifically, by self-report, 2.5% of Health Links clients were "American Indian" (no analogous category exists in county population statistics); 1.2% were "Black American" (0.7% in the county overall); 3.1% were "Hispanic" (1.2% in the county overall); 0.9% were "Asian" (no similar category for the county overall); and 2.2% fell into the "other" category (1.2% in the county overall). Overall, 9.2% were nonwhite in a county where only 2.3% of the general population is nonwhite. It is likely that this reflects a greater racial and ethnic diversity among the low-income population than among other population groups and more poverty among racial and ethnic minority groups than among white residents of Franklin County, as elsewhere.

Recipient status for other benefits. The Health Links intake form asked patients whether they were receiving benefits from any of the following publicly funded income support or health insurance programs: MassHealth (Medicaid), Medicare, Social Security Disability or Supplemental Security Income (SSI), or unemployment compensation. A total of 208 (14.1%) reported other beneficiary status; among them were 72 with Medicaid coverage (4.9% of all patients), 38 with Medicare coverage (2.6%), 60 receiving Social Security Disability or SSI payments (4.1%), and 38 receiving unemployment compensation (2.6%).

Health care access markers. Finally, Health Links patients were asked whether they had any health insurance coverage, whether they had an ongoing relationship with a primary care provider, and whether they had been seen in the hospital emergency department within the previous two years. (See Table 1.) Not surprisingly, substantial majorities reported having no health insurance (89.9%) and no primary care provider (81.4%). Many of those who had primary care providers came to Health Links after having accumulated substantial back bills with their physicians' offices and being told that they could not be seen again until these accounts were settled.

Questions of access to the existing system are raised by the fact that 7.5% of all patients had Medicaid or Medicare coverage. Why these patients presented to Health Links rather than going directly to a medical office is a question warranting further investigation.

One important consideration is whether there are cultural access barriers within the existing local health care delivery system independent of financial barriers. For example, during the study period no health care facility in Franklin County (including the hospital and Health Links itself) had any formal medical Spanish interpreting capacity.

Nearly 40% of patients reported having gone to the local hospital emergency department within the two years

prior to their initial presentation to Health Links. An analysis of the emergency department and inpatient records of the Health Links population, had it been possible, would have been useful in beginning to sort out how many of these emergency department visits could have been avoided with access to routine primary and preventive care.

UTILIZATION OF THE HEALTH LINKS PROGRAM

Given a total of 1,476 unduplicated individuals (Table 2), the 9,494 total contacts averaged out to 6.4 contacts per patient or 3.2 contacts per patient per year.

Eighty-four percent of presentations to Health Links were managed at the point of contact with Health Links volunteers, staff or volunteer nurses, or physicians volunteering at one of the two weekly walk-in sites. In other words, the vast majority of patient presentations were managed either by telephone or at one of the sites.

A total of 1,515 contacts resulted in referrals for further office-based, standard-quality care, representing just 16% of total Health Links contacts, or one referral per patient over the study period and 0.5 referrals per patient per year. These are very telling numbers. Although the clinical appropriateness of triage decisions cannot be second-guessed and no conclusive interpretation can be drawn, the fact that 84% of patients presenting to Health Links did not go on to receive office-based standard-quality care suggests that a very high threshold for such referrals existed. Further, the numbers suggest that the project's primary activity was not providing access to care, but rather stringent gatekeeping, that is, withholding of standard-quality health care resources.

The limited volume of referrals for office-based care may have been driven by physicians' reluctance to provide substantial free care. Table 3 shows provider participation by specialty. Medical referrals—referrals to physicians, physician assistants, certified nurse midwives or nurse practitioners—accounted for 1337 or 88%, of total referrals. The other 178, or 12% of referrals, were for general dentistry, oral surgery (these combined accounted for 152, or 10% of all referrals), podiatry (9 referrals, 0.6% of total), and chiropractic treatment (17 referrals, or 1.1% of total referrals).

Nearly all community physicians—89%—agreed to accept referrals to see Health Links patients in their offices. Participating providers accepted a mean of 12.2 Health Links office referrals per year, or just 1.0 per month. However, the volumes seen by different specialists varied dramatically, ranging from an average of two referrals per provider per year or 0.17 per month (nephrology) to 18.6 referrals per provider per year or 1.6 per month (obstetrics/gynecology).

The level of commitment by the local medical community to provide free care was limited, variable, and fragile throughout the study period. One specialty practice never accepted the premise that Health Links patients should not be billed, and did in fact bill patients for a percentage (usually 50%) of their standard charge. One physician dropped out of the program during the study period; since he was the sole provider of services in a major medical subspecialty, this left a large access gap in services. Other specialists were able to pick up some of the referrals; however, Health Links staff continued to feel that access to care was at the whim of individuals possessing local monopolies on vital specialty services.

The single non-participating general internist claimed that he routinely negotiated directly with patients to offer his services at no charge or under a barter arrangement. He viewed Health Links as an unnecessary intermediary, performing a redundant administrative function in determining patients' medical and financial needs. He stated that he preferred to continue practicing the older model of direct dispensation of charity care (Personal communication, Barry Poret, MD, Greenfield, MA, September 1999). Most physicians took an opposite approach, however, informing all patients unable to pay for their care that they could only be seen as part of the Health Links referral process.

The most generous practitioners saw fewer than two Health Links patients a month, while the least generous saw only two patients per year. The overall volume of care was quite modest, given the high number of uninsured patients in Franklin County.

The low rate of participation by the dental community bears special mention. Only three of 23 practicing dentists accepted Health Links referrals. These same three practitioners were also the only local dentists accepting MassHealth (Medicaid) payments. Nonparticipants explained this to Health Links staff in terms of simple economic self-interest.

Following the study period, when all Health Links patients began to be referred to a new-start federally funded community health center, attendance at Health Links sites dropped off precipitously. Within approximately six months a majority of former Health Links clients had successfully transferred to become patients of

Table 1. Selected characteristics of Health Links clients, as self-reported by adults and reported by parents/caregivers for children, September 1, 1995, to August 31, 1997 (*N* = 1,476)

Characteristic	*Number*	*Percent*
Age (years)		
0–11	134	9.1
Female	66	
Male	68	
12–19	152	10.3
Female	82	
Male	70	
20–64	1,159	78.5
Female	739	
Male	420	
≥65	31	2.1
Female	22	
Male	9	
Family size (*n* = 1322)		
1	543	48.1
2–4	637	48.2
≥5	142	10.7
Gross family income		
≤$22,000/year	1,322	89.6
>$22,000/year	154	10.4
Employment status of those ages 20–64 (*n* = 1159; 739 female; 420 male)		
Employed part-time	392	33.8
Employed full-time	238	20.5
Unemployed	529	45.6
Population of town of residence		
10,001–20,000 (2 towns)	634	43.0
2,001–10,000 (7 towns)	490	33.2
1001–2000 (10 towns)	250	16.9
1–1000 (9 towns)	88	6.0
Not applicable[a]	14	0.9
Other benefits received		
Medicaid	72	4.9
Medicare	38	2.6
Social Security Disability/ Supplemental Security Income	60	4.1
Unemployment insurance	38	2.6
Health care access markers		
No health insurance	1,326	89.9
No primary care provider	1,202	81.4
Seen in emergency room in previous two years	589	39.9

[a]Includes people who were homeless and lived out of area

the new community health center. The community health center now sees approximately as many patients in three months as were referred for care by Health Links over the entire two-year study period.

PROGRAM COSTS

The Bureau of Primary Health Care's Rural Health Outreach Program, which funded Health Links from 1994 through 1997, provided $400,800 over the two-year study period. These funds covered personnel costs, reimbursement to the hospital for laboratory and radiology charges resulting from Health Links visits, and some limited prescription assistance for Health Links patients who could not afford to pay for medications ordered by providers.

Table 4 shows the cost of the program, assumed to equal the amount of the federal Rural Health Outreach Grant over the two-year study period, considered in three different ways: cost per individual patient, cost per referral, or cost per contact. Each way of looking at cost is given on a total, annualized, and monthly basis, to allow for gross comparisons with standard insurance premiums and managed care capitation payments.

First, viewing Health Links as a system of care to individuals, the program's cost was $271.60 per patient over the two-year period, or $135.80 per patient per year or $11.32 per patient per month.

Viewing Health Links as a mechanism for screening and referring patients to office-based, standard-quality care, the cost per referral was $264.61 over the two-year period, or $132.31 annualized or $11.03 per referral per month.

Finally, viewing the Health Links program as a system of labor-intensive supportive social contacts and nurse triage by telephone and at non-medical sites, as well as a system of referrals, the cost can be viewed as $42.23 per contact overall, or $21.11 per contact per year or $1.76 per contact per month. These totals include all contacts

recorded in the office telephone log, including calls inquiring about hours and directions, which explains why the cost per medical contact was so much higher.

The hospital provided additional unmeasured resources, including unreimbursed planning and grant-writing time and other indirect costs. However, by and large all Health Links services during the two-year period under analysis were paid for by the federal Rural Health Outreach Program. Due to the seniority of the hospital nursing personnel who successfully "bid" for the Health Links staff positions (among the most highly paid nurses in Franklin County), total costs to the program were probably somewhat higher than might otherwise have been the case.

Additional revenue would have been generated for the hospital had the program not missed an opportunity to pursue insurance reimbursement. Patients were not screened or assisted in completing paperwork for health insurance programs for which they might have been eligible. For example, many Health Links patients would have been eligible for MassHealth, the state's Medicaid program, which would have covered provider visits, prescription drugs, and inpatient costs. In addition, Massachusetts has an Uncompensated Care Pool through which hospitals recapture some of their costs for treating patients who cannot pay. For those patients who met the eligibility requirement (total family income at or below 200% of the Federal poverty level), their hospital charges, including laboratory, radiology, inpatient, and emergency department charges, would have been reimbursed in part by the Uncompensated Care Pool.

QUALITY OF CARE

Health care quality is generally understood to be a function of many complex factors including appropriate and timely clinical content, various accessibility and access factors (for example, cultural competence), and continuity of care.[9,10]

Continuity of care was not one of the original goals of the Health Links program. Continuity was left to the discretion of providers, and was highly variable. When referrals were made to a medical office for standard care, these were usually with the goal of addressing an urgent problem and there was no implied commitment that the patient would be retained by the practice. Although some patients were retained as long-term primary care patients by the providers to whom they were referred, most apparently were not. Health Links staff and volunteers noted that many patients, including many with chronic illness, returned seeking a new referral with each new acute problem or each time they ran out of medication.

Although records were kept of all Health Links contacts and referrals, medical records were of course kept by the practices to which patients were referred. Information concerning the medical content of office visits was not systematically fed back to Health Links staff. Thus, while a kind of social continuity was provided by staff and volunteer nurses at the sites, medical continuity of care was not necessarily achieved. In the longer term, since the Health Links program was not a permanent feature of the local infrastructure, even this social continuity was unfortunately lost.

Clinical preventive services and primary care were not routinely provided through Health Links referrals. As noted above, preventive health services such as cancer screening and cardiovascular risk factor assessment and modification were not routinely offered at Health Links sites. In addition, preventive services were not routinely performed by providers due to the urgent care focus of the program. Low rates of preventive service delivery and lack of continuity of care have recently been noted elsewhere in a similar charity care program.[1]

CONCLUSIONS

Health Links, an administrative and gatekeeping charity care referral program, provided access to extensive social support, nursing triage, and brief treatment for patients presenting with urgent health problems, resulting in a

Table 2. Health Links Program utilization, September 1, 1995–August 31, 1997

Number of unduplicated clients	1,476
Number of nursing contacts	9,494
Contacts not resulting in referrals	
Number	7,979
Percent	84
Contacts resulting in referrals	
Number	1,515
Percent	16
Mean number of nursing contacts per client per year	3.2
Mean number of referrals per client per year	0.5

Table 3. Provider participation rates and referral rates by specialty, Health Links program, September 1, 1995–August 31, 1997

Specialty	Number of participating providers	Number of nonparticipating providers	Specialty participation rate	Number of referrals	Mean annual number of referrals per provider
Obstetrics/gynecology	7[a]	0	100	261	18.6
Otolaryngology	1	0	100	36	18.0
Urology	1	0	100	33	16.5
Ophthalmology	5	0	100	158	15.8
General dentistry	3	23	12	95	15.8
General internal medicine	17[b]	1	94	527	15.5
General surgery	3[c]	0	100	69	11.5
Family medicine	4	4[d]	50	89	11.1
Orthopedics	3	0	100	65	10.8
Neurology	1	0	100	19	9.5
Oral surgery	3	0	100	57	9.5
Gastroenterology	1	0	100	13	6.5
Dermatology	2	0	100	20	5.0
Cardiology	2	0	100	20	5.0
Podiatry	1	5	20	9	4.5
Pulmonology	1	0	100	6	3.0
Pain clinic	1	0	100	5	2.5
Pediatrics	5	2	71	25	2.5
Chiropractic	4	13	31	17	2.1
Nephrology	1	0	100	4	2.0
Total	66	48	58	1515	11.5

[a]Includes three physicians and four certified nurse midwives

[b]Includes two physicians who also accepted rheumatology and endocrinology referrals and two nurse practitioners

[c]Reduced fees charged to Health Links patients

[d]Two physicians who were not counted among "participating" providers volunteered at Health Links sites but did not accept office referrals.

modest volume of charity care given by the local medical community on an episodic basis. Both the volume of care and the quality of care provided through this program were substandard compared to that available to insured patients with a medical "home" who receive routine preventive and primary medical care.

As the administrative structure could not be sustained without substantial inputs, the project was grant-dependent. Costs to the Rural Health Outreach Program, which funded Health Links over the two-year study period, were between $11 and $12 per patient per month. This is less than many managed care reimbursement rates for full service preventive and primary care (although capitated HMO payments do not cover the costs of specialty and ancillary services). Nevertheless, considering the limited volume and substandard quality of services purchased with these dollars, the cost may still be considered excessive compared to other potential uses for federal and philanthropic funds. A particular irony of the Health Links experience was that many uninsured patients used the program despite their eligibility for Medicaid and the Massachusetts Uncompensated Care Pool, programs that otherwise would have paid for standard-quality medical care services in office and hospital settings and for affordable prescription drugs. The lack of Health Links protocols for eligibility testing and paperwork completion for public insurance programs was an internal flaw in the project. Therefore federal funding

Table 4. Direct costs of Health Links program, September 1, 1995–August 31, 1997

	Two-year period	Per year	Per month
Cost per contact	$42.23	$21.11	$1.76
Cost per referral	264.61	132.31	11.03
Cost per client	271.60	135.80	11.32
Total	400,890.00	—	—

for Health Links actually created a local disincentive for the utilization of available public payment mechanisms.

The Health Links experience raises, without answering, the question of whether in the worst case this kind of charity care program may actually lead to a decrease in the overall volume and quality of available free care—as an unintended consequence of accepting a gatekeeping role, and thereby insulating the local medical community from pressure to serve the working and unemployed poor who make up the medically underserved.

The single nonparticipating internist and his rationale for not participating in Health Links—that he was already subsidizing a significant amount of care for patients within his own practice who could not afford to pay his fees—should not be overlooked if charity care as a model is to be rigorously analyzed. In other words, the volume of care provided through Health Links cannot be compared to zero, but should be compared to some amount of informal, or "old-style" charity care provided as an integral part of medical care, and formerly accepted as a legitimate part of the cost of doing this type of business. prior to the existence of an administrative/gatekeeping entity such as Health Links. It is important to note that the existence of Health Links resulted in most participating practices explicitly terminating any delivery of direct, informal charity care to their patients, requiring any patient unable to pay to seek services through the Health Links system.

Following the study period and up to the present time, some Health Links volunteer physicians maintained and increased their level of effort, agreeing to accept charity care referrals directly from the new community health center as a legitimate referral source. However, some specialty providers have expressed consternation that the health center does not play the gatekeeping role that Health Links once did.

In summary, due to the relatively high cost of providing "free" care under this model, it may not be a sustainable or long-term solution by itself in most communities. Health policymakers and funding bodies should seriously consider whether the costs and benefits of this new style administrative and gate-keeping charity care model offer a truly effective way of extending medical care access to the ever-increasing numbers of the poor and underserved.

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